# 9257 WIRE DRAG

Diag. Cht. No. 1272-2.

NOAA FORM 76-35A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

# **DESCRIPTIVE REPORT**

(HYDROGRAPHIC)

Type of Survey WIRE DRAG

Field No. RH-20-3-71WD

Office No. H-9257

LOCALITY

State LOUISIANA

General Locality MISSISSIPPI RIVER DEITA

Locality ENTRANCE TO SOUTH PASS

1971

CHIEF OF PARTY
CDR JAMES COLLINS

LIBRARY & ARCHIVES

DATE 6/20/72

**☆U.S. GOVERNMENT PRINTING OFFICE: 1974-763-098** 

WIRE DRAG

FORM	C&GS-537
(6-66)	

#### U.S. DEPARTMENT OF COMMERCE ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION COAST AND GEODETIC SURVEY

REGISTER NO.

H-9257

## HYDROGRAPHIC TITLE SHEET

INSTRUCTIONS - The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

FIELD NO.
RH 20-3-71WD

filled in as completely as possible, when the sheet is forwarded to th	e Office.
TOUTSTANA	
State LOUISIANA	
General locality MISSISSIPPI RIVER DELTA ENTRANCE TO	
Locality ENTRANCE TO  NEAR SOUTH PASS	
Scale 1:20,000	
astructions dated 28 JULY 1971	
Vessel NOAA SHIPS RUDE-HECK	_
Chief of party CDR JAMES COLLINS	
Surveyed by G.R. SCHAEFER, A.Y. BRYSON, A	4.M. ETHERIDGE
Soundings taken by echo sounder, hand lead, WIRE	DRAG SURVEY
Graphic record scaled byN.A.	
Graphic record checked by N.A.	
Protracted by B.J. STEPHENSON	Automated plot by
DRAG STRIPS INKED BY: B.J. STEPHENSON Soundings penciled by	
Soundings in fatherns feet at MLW XILLYX	
REMARKS:	
·	
applue	to state 7/10/72
XWW 3/23/85	USCOMM-DC 37009-P66

# DESCRIPTIVE REPORT TO ACCOMPANY WIRE DRAG FIELD NO. RH-20-3-71 SHEET "A" PROJECT OPR-479-RU/HE-71 MISSISSIPPI RIVER DELTA 1971 CDR JAMES COLLINS NOAA SHIPS RUDE & HECK

- A. AUTHORITY Project Instructions, OPR-479-RU/HE-71, Sea Lanes, Gulf of Mexico, dated 28 July 1971.
- B. CHARACTER AND LIMITS OF THE WORK The purpose of this project is to clear the Safety Fairways and the anchorage varea off the entrance to South Pass.

The locality of the survey covered by C&GS Chart 1272 is the Safety Fairway and Anchorage Area from the entrance to South Pass to the 120 foot contour. The survey was conducted on a scale of 1:20,000 using visual and Raydist fixes for control.

C. CONTROL - Raydist control was utilized on all days. Visual control was used in addition to raydist on C,E,F, and H days.

A listing of signals used is given in Attachment I.

- D. DATE OF SURVEY Dragging for OPR-479-RU/HE-71 on Sheet "A" began 1 September 1971 and was completed 14 September 1971.
- E. TIDAL REDUCERS Preliminary reduction of each day's data was made using predicted tides for the standard vide gage at Pensacola, Florida from Greenwich Mean Time. Actual tidal data was furnished by the Rockville Office from the standard tide gage at Pensacola, Florida.

Tide data for all strips was corrected as follows: HIGH WATER  $\#-2\pi h^{13}27m - 0.20$  ft. LOW WATER  $\#-2\pi h^{35}27m = 0.0$  ft.

- F. JUNCTIONS Sheet A joins Sheet B, however wire drag surveys will not junction due to project limits.
- G. SPLITS All areas within the project limits were covered  $\sqrt{\phantom{a}}$  without splits. All strips have sufficient overlap.
- H. GROUNDINGS AND HANGS There were no unanticipated groundings or hangs.

I. GENERAL NOTES - Raydist calibration was made by circle calibrating EAST or taking three point fixes.

Buoy R"2" and STORM, a temporary oil platform, were circle calibrated by the RUDE. These objects were later used as established positions for checking raydist lane count.

Reconnaissance hydrography was run by both ships strictly for the purpose of determining controlling depths. This hydrography should not be used for charting.

Daily strip description is recorded in the daily journal.

- J. CURRENTS Currents ran predominantly southwest except when there was steady northeast wind for several days.
- K. DISCREPANCIES AND COMPARISON WITH PREVIOUS SURVEY AND CHARTS None. See Review sections D and E-1
- L. PERSONNEL AND EQUIPMENT During the 1971 field season the Ships RUDE & HECK acted as guide and end vessels respectively. The RUDE & HECK launches equipped with DE-723 fathometers were alternated as the drag tender. During calm weather the RUDE or HECK skiff was used to tend the drag. At times both a launch and skiff were used to tend the drag, in order to speed raising or lowering of the drag when working shoals.

Cuts to the end buoy and opposite vessel were made by gyro repeaters.

The distance from the mast to the end buoy was 265 meters when an 800 ft. towline was used.

Standard wire drag equipment was used throughout the survey. Maximum length of drag used was 9600 feet while 4200 feet was the minimum.

Officers onboard during work on Sheet "A" were: CDR J. Collins, LT G.R. Schaefer, LTJG A.Y. Bryson, and LTJG M. M. Ethridge.

- M. MISCELLANEOUS Greenwich Mean Time was used throughout the project.
- N. RECOMMENDATIONS This survey is considered adequate with respect to the wire drag requested.

Submitted by,

Max M. Ethnidge

Max M. Ethridge LTJG NOAA

#### APPROVAL SHEET

All records of this survey prior to smooth plotting are hereby approved. The 1971 Field Work was personally supervised by the undersigned, and the boat sheet and records were inspected daily. This survey is considered complete and adequate for charting. No additional field work is recommended.

Cames Collins

#### TABLE OF ATTACHMENTS

- I. CONTROL SIGNALS
- II. TIDAL NOTE
- III. FLOATING AIDS TO NAVIGATION
- IV. STATISTICS

#### ATTACHMENT I

#### CONTROL SIGNALS

NAME	STATION	SOURCE	YEAR
RED	BRETON RAYDIST LAT 29°29'39.161" LONG 89°	AMC 10'27.808"	1971
GREEN	BUGS LAT 29 <sup>0</sup> 16'25.968" LONG 89 <sup>0</sup>	AMC 256'33.542"	1971
REAR	SOUTH PASS LIGHT REAR 2 Lat. 29°00' 54.134", Long. 89°10' 00.514"	G-11039	<del>1963</del> 1955 - 65
EAST	SOUTH PASS EAST JETTY LTHO Lat 20° 59' 22.586", Long 89° 08' 10.841"	G-3045	<del>1934</del> 1904 r 34
R2	R"2" BUOY RED 1265.4 GREEN 1926.8 LAT 28058'44" LONG 89006'3	NOAA Ship RUDE	1971
STORM	J. STORM I (a temporary oil platform) LAT 28 <sup>o</sup> 59'18" LONG 89 <sup>o</sup> 05'0 RED 1249.84 GREEN 1965.72	NOAA Ship RUDE 08" (This platform was re 1972 and area clea. 14 Sept. 1972	

ATTACHMENT II

#### TIDAL NOTE

Hourly tide heights were supplied by the Rockville Office, (Chief, Tides Section) for Pensacola, Florida, time meridian 90°W. Height is ft. below mean low water.

Tide corrections recommended by the Rockville Office are as follows:

See Tide Note (Form 712).

Tide corrector printout and table of hourly heights filed in cahier with Misc. Data.

#### ATTACHMENT III

#### FLOATING AIDS TO NAVIGATION

The following buoys were located and a general depth obtained.

R"2" Whis "2"

DATE

1 SEPT 1971

Raydist Location R 1265.4 G 1926.8

LAT - LONG

28058144" 89006132"

General Depth 75 feet

R"3" Bell "3"

DATE

1 SEPT 1971

Raydist Location R 1245.9 G 1875.5

LAT - LONG

28<sup>o</sup>59'07" 89<sup>o</sup>07'55"

General Depth 20 feet

BW BUOY

DATE

1 SEPT 1971

Raydist Location R 1098.85 G 2007.45

LAT - LONG

29<sup>0</sup>03'37" 89<sup>0</sup>02'19"

General Depth

30 feet

#### ATTACHMENT IV

#### STATISTICS

DATE	DAY LETTER	STRIP NO.	VOLUME NO.	POSITIONS	LINEAL NAUTICAL MILES	SQUARE NAUTICAI MILES
1 SEPT 71	Α		I	143	38.9	RECON HYDRO
2 SEPT 71	В	I	I	56	4.0	4.8
3 SEPT 71	C	I	I	2 <b>X</b>	1.0	1.2
8 SEPT 71	D	, I	I	11	1.6	1.0
	D	II	I	22	2.6	1.8
9 SEPT 71	E	I	I	11	ot plotted	
	E	II	I	78	6.2	5.0
10 SEPT 71	F	I	II	30	2.3	2.0
13 SEPT 71	G	I	II	75	6.3	6.3
14 SEPT 71	Н	I	II	58	3.3	3.3
	Н	II	II	22	1.5	0.9
WIRE DRAG TOTALS	7	10	2	38 <del>2</del>	28.8	26.3

#### U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY

# TIDE NOTE FOR HYDROGRAPHIC SHEET

Processing Division: Atlantic Marine Center:

Hourly heights are approved for Form 411

Tide Station Used (NOAA Form 77-12): Pensacola

Period: September 2-14, 1971

HYDROGRAPHIC SHEET: H-9257 WD

OPR: 479

Locality: Mississippi River Delta

Plane of reference (mean tower low water): 8.21 ft.

Height of Mean High Water above Plane of Reference: 1.1 ft.

Remarks: Zoning:

Time Correc	ctions	Height Cor	rections
<u>HW</u>	<u>IM</u>	HW	TM
2 hr. 13 min.	-2 hr. 35 min.	-0.2 ft.	0.0 ft.

The following reducers have been revised in red and verified:

Volume	Day	Position
II	G	32-61 /
II	H	1-23

Chief, Tides Branch

# ELECTRONIC CONTROL PARAMETERS

1.	Project # OPR-479	2. Reg. # H- 925	7 3. Field	# RH-20-3-71 WD
4.	Type of Control:	RAYDIST	(Hi-Fix, R	aydist, EPI, etc.)
5.	Frequency 3300.4 kg	es KHz (for convers	ion of electron	ic lanes to meters)
6.	Mode of Operation (	check one):	•	
	Range-Range X		Range-Visual	
	Range One (R <sub>1</sub> ) Station I.D. Range Two (R <sub>2</sub> ) Station I.D.	BRETON BUGS	Lat. 29 Long. 89 Lat. 29 Long. 89	29 39.161 " 10 27.808 " 16 25.968 " 56 33.5/2 "
	Hyperbolic (3-sta	tion)	Hyper-Visual	
	Slave One Station I.D. Master Station I.D. Slave Two Station I.D.		Lat. Long. Lat. Long. Lat. Long.	
7.	Location of Survey:		•	
	Range-Range X	Imagine an obser looking directly		$g$ at $R_1$ Station and one):
	•	Survey area is t	o observer's Ri	ght A=Ø
		Survey area is t	o observer's Le	eft X A=1
	Hyperbolic	Looking from sur	vey area toward	Master Station:
		Slave One must b	e to observer's	<u>Left</u> ;
		Slave Two must b	e to observer's	Right.
8.	This form is su	bmitted as an aid	in preparing a	a boat sheet.
	This form appli	es to all data on	this survey.	
	This form appli	es to part of the	data on this	survey.
• •	Vessel EDP # Time	From Day Tim	To le Day	Position Numbers (inclusive)
				to to
9.	Remarks: MYLAR _	SMOOTH SHIME	-	

# ATLANTIC MARINE CENTER

# PROJECTION PARAMETERS

# POLYCONIC OR MODIFIED TRANSVERSE MERCATOR

1. Project No. OPR -479	4. Requested By Billy J. Stephenson
2. Reg. No. H-9257	5. Ship or Office Verification Branch
3. Field No. RH-20-3-71 WD	_ 6. Date Required ASAP
7. Polyconic X Modi	dified Transverse Mercator
8. Central Meridian of Project	
9. Survey Scale: 1: 20,000	
10. Size of Sheet (check one):	
36 x 54 X 36 x 60	Other Specify
11. Sheet Orientation (check or	one):
NYX = 1	$NYX = \emptyset \boxed{X}$
. N	N
CMER	CMER
12. Plotter Origin: S.W. Corn	ner of Sheet (not necessarily a grid intersection)
Latitude 28 °	
Longitude 89 °	11 00 "
13. G.P.'s of triangulation an	and/or signals attached
14. Material Desired: Tracing Smooth Sheet T Other	ng Paper Mylar X
15. Remarks:	

FORM 157 (3-16-55)

P.O. Cuide of Has J.S. Light List GEOGRAPHIC NAMES Onlock Made Survey No. H-9257 W. D. OL NO. Name on Survey F G H 2 3 6 7\_ 8 9 10 11 12 13 14 15 16\_\_\_ 17 18\_\_\_ 19 20\_\_ 21 22 23 24 25 26 27

# Hydrographic Surveys (Chart Division) HYDROGRAPHIC SURVEY NO. H-9257 (RH-20-3-71 WD)

cords accompanying survey	<b>!:</b>	Smooth she	nal /- Smoot	A Tender
cords accompanying survey boat sheets 2; sound	ling vols. 2	; wire are	SE VOLS.	4.
Descriptive Reports	Accordian exception	File:-Daily 31 Files - Pecorder - 41	nvelones 4	plies atter she
special reports, etc/	- Folder Tide C	Corrections CoHo	ched to Day	cr. Reports
4-W.D. Vols., 1-Smooth A&D S	heet, 1-Boat She	et.4&D & 1*Rol	I.W.D. Stri	p .Tracings.
•				
ne following statistics wi	ill be submittet:	ted with the	cartog-	•
Number of positions on			38.8	•
Number of positions	checked		50	
Number of positions	revised	المرافق المرافق المرافق المرافق المراف		
Number of positions rev (refers to depth only	ised	ik kat <mark>i</mark> ty – tyvi od sv 1944 – Santon Santon († 1967) 1944 – Santon Santon († 1967)		
Number of soundings/erro	neously space	ad	N.A.	• • •
Number of signals erron or transferred	cously plotto	<b>)d</b> `		• • · · · · · · · · · · · · · · · · · ·
Topographic details		m.	ime	
Junctions		T	ime	0
Verification of sounding graphic record	igs from	<b>T</b> :	ime0	0 58
Special adjustments		* ***	ime	• •
B.J. Stephen erification by W.W. Feozel	Total	alstime 5.7%	Date 6.	19-72 8-72
deviewed by Kenneth W. We	· -	Total 67 h	hrs. Date 10:	-20-75
Inspected by D.R. Engle		16	4.3	-02-76

# OFFICE OF MARINE SURVEYS AND MAPS MARINE SURVEYS DIVISION HYDROGRAPHIC SURVEY REVIEW

#### REGISTRY NO. H-9257 W.D.

FIELD NO. RH-20-3-71WD

Louisiana, Mississippi River Delta, Entrance to South Pass

SURVEYED: September 1 - 14, 1971

SCALE: 1:20,000 PROJECT NO.: OPR-479

SOUNDINGS: Wire Drag CONTROL: Raydist (Range-

Range) and Sextant Fixes

on Fixed and Float-

ing Signals

Chief of Party	
Surveyed by	
	A. Y. Bryson
	M. M. Ethridge
Protracted by	B. J. Stephenson
Drag Strips Inked by	B. J. Stephenson
Verified and Inked by	B. J. Stephenson
	W. W. Feazel
Reviewed by	K. W. Wellman
	October 20, 1975
Inspected by	D. R. Engle

#### A. Purpose of the Survey

The purpose of this survey is to clear the Safety Fairway and anchorage area at the entrance to South Pass.

#### B. Shoreline and Control

No shoreline is shown on this offshore survey.

The source of control for this survey is adequately described in the Descriptive Report.

#### C. Junctions

No other wire drag surveys junction with the present survey.

# D. Comparison with Hydrographic Surveys

H-6513 (1939) 1:20,000 H-6553 (1939-40) 1:40,000

There are several soundings on these prior surveys in conflict with cleared effective depths on the present survey. Eleven prior soundings, ranging from 7 to 9 feet, conflict with present cleared depths of 10 and 11 feet in the vicinity of latitude 28°58.60', longitude 89°08.00'. These soundings are located outside of the charted Safety Fairways in an area of shifting shoals. In addition, there are three soundings of 48, 49, and 50 feet in the vicinity of latitude 28°59.60', longitude 89°06.51' which fall within an area cleared to an effective depth of 52 feet.

The area of the present survey is subject to constant shifting, erosion, and deposition of bottom sediments thereby rendering the continued validity of these prior soundings highly questionable. All soundings on these prior surveys in conflict with present cleared depths are considered disproved and should be disregarded in future charting.

## E. Comparison with Chart 11361 (formerly chart 1272), latest print date Feb. 15, 1975

#### 1. Hydrography

Except as noted below, there are no conflicts between the charted depths and the effective wire drag depths of the present survey.

The 48- and 49-foot soundings charted respectively in latitude 28°59.55', longitude 89°06.56' and latitude 28°59.66', longitude 89°06.56' originate with H-6553 (1939-40). Being cleared by wire drag to an effective depth of 52 feet, they are considered disproved by the present survey and should be deleted from the chart.



#### 2. Aids to Navigation

The floating aids to navigation on the present survey are in substantial agreement with their charted positions and adequately mark the intended features.

## F. Condition of the Survey

#### 1. Field Work

The field work is satisfactory except for a few areas where cleared depths are not in conformity with the Wire Drag Manual or the project instructions. Two 52-foot groundings (latitude 28°59.43', longitude 89°06.68' and latitude 28°59.63', longitude 89°06.61') were cleared by only 38 feet, and three 55-foot groundings (vicinity of latitude 28°58.25', longitude 89°06.98') were cleared by 39 feet. These cleared depths are well above the grounding depths and are not in compliance with sections 3-20 of the Wire Drag Manual or paragraphs 11 and 13 of the project instructions.

# Call of

#### 2. Records

The records are complete and comprehensive.

#### 3. Descriptive Report

The Descriptive Report is complete and comprehensive.

#### 4. Field Plotting

The field plotting is satisfactory except that the notes referring to groundings were unnecessarily detailed, providing reference to every strip clearing the grounding instead of indicating the maximum cleared depth only.

#### G. Compliance with Project Instructions

Except as noted in section F-l above, this survey adequately complies with the project instructions.

#### H. Additional Field Work

This is an adequate wire drag survey and no additional field work is recommended.

#### I. Miscellaneous

The verifier failed to obtain the Tide Note (Form 712) thus necessitating an examination of the survey records by the

Tides Branch as a condition to its acquisition during review. As a result of this examination, significant revisions were made to the tide correctors utilized on G and H days thus necessitating the replotting of the affected portions of the effective depth diagrams.

Examined and Approved:

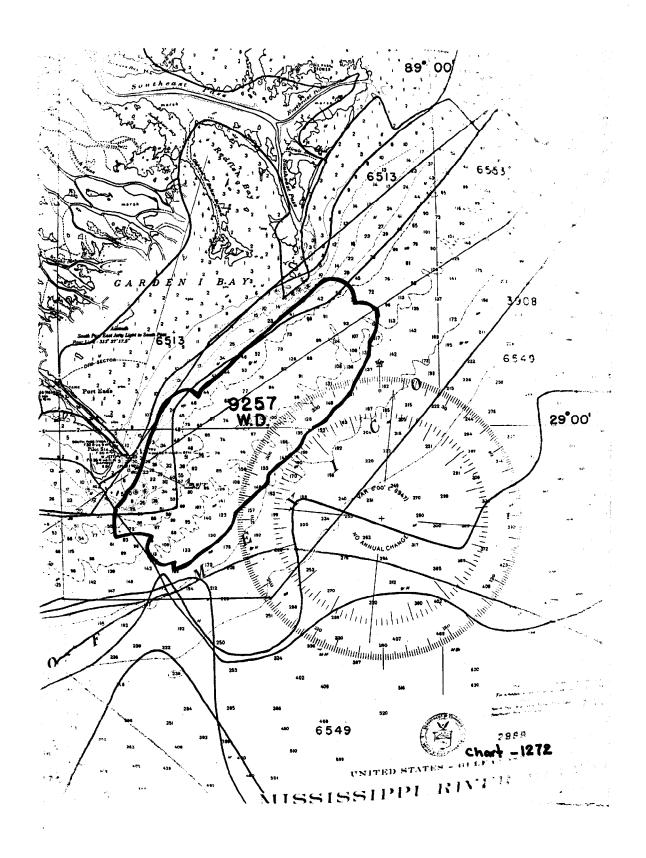
Chief

Marine Surveys Division

Associate Director

Office of Marine Surveys

and Maps



#### **RECORD OF APPLICATION TO CHARTS**

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. \_

#### INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

1. Letter all information.

2. In "Remarks" column cross out words that do not apply.

3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

CHART	DATE	CARTOGRAPHER	REMARKS
1272	8/1/72	Helmer	Part Before Age Review Inspection Signed Via
[11361)			Drawing No. 424700f
51		00	
1115	8/4/72	Stunday	Part Before Me Vision Review Inspection Signed Via
11360)			Drawing No. 29 Part.
		10	0
1003	8/4/72	A Sunday	Part Before Afra Marie Ba Review Inspection Signed Via
(1006)	///		Drawing No. 23
		00	
1007	8-4-72	abuda	Part Before Afair Medianion Review Inspection Signed Via
[411)		0	Drawing No. 48
	·	111	
11361	5/10/15	1. Illebander	Full Part Before After Verification Review Inspection Signed Via
	// 2		Drawing No. 60 Fully appid.
			/ //
11360	7-18-90	EdWartin	Full-Part Before After Verification Review Inspection Signed Via
			Drawing No. 45 thru 11361 drg 68
	•		
11006	3/8/91	D. BLACK	Full Part Before After Verification Review Inspection Signed Via
			Drawing No. 37 TH M 11360 DRG, 45.
			Full Part Before After Verification Review Inspection Signed Via
٠			Drawing No.
1		<u> </u>	
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.

FORM CAGS-8352 SUPERSEDES ALL EDITIONS OF FORM CAGS-978.

USCOMM-DC 8558-P68